

CLAIMS

1. A method for determination of the torque of an internal combustion engine by acquisition (1) of a first measured variable relating to an angular velocity of an internal combustion engine,
characterized by
acquisition of a second measured variable relating to a charge pressure of the internal combustion engine or simulation of a charge pressure value on the basis of the first measured variable and
determination of the torque from the first measured variable and the second measured variable or from the first measured value and the simulated charge pressure value.
2. The method as claimed in claim 1, wherein angular velocity is acquired by way of a sensor wheel as first measured variable.
3. The method as claimed in claim 1 or 2, wherein a sensor wheel error is compensated (2) in determination of the torque.
4. The method as claimed in one of claims 1 to 3, wherein the first measured variable relating to the speed is filtered (3) to reduce disturbances in determination of the torque.
5. The method as claimed in one of claims 1 to 4, wherein the inertial forces caused in rotation of the internal combustion engine by the components of such internal combustion engine are compensated (4) in determination of the torque.

6. The method as claimed in one of claims 1 to 5, wherein the charge pressure is taken into consideration by way of a characteristic (5) in determination of the torque.
7. The method as claimed in claim 6, wherein the characteristic is linear and is obtained in particular by charge pressure variation measurements or discharge measurements.
8. A device for determination of torque of an internal combustion engine, having

a first sensor mechanism for acquisition (1) of a first measured variable relating to angular velocity of the internal combustion engine,
characterized by a second sensor mechanism, acquisition of a second measured variable relating to charge pressure of the internal combustion engine or a simulation mechanism for simulation of a charge pressure quantity as a function of the first measured variable and
a data processing mechanism which is connected to the first and second sensor mechanisms or to the first sensor mechanism and to the simulation mechanism for determination of torque from the first measured variable and the second measured variable or from the first measured variable and the simulated charge pressure variable.
9. The device as claimed in claim 8, wherein the first sensor mechanism has a sensor wheel by means of which an angular velocity may be acquired as first measured variable.
10. The device as claimed in claim 8 or 9, wherein the data processing mechanism comprises a compensation mechanism for compensation (2) of a sensor wheel error.

11. The device as claimed in one of claims 8 to 10, wherein the data processing mechanism comprises a filter unit for filtering (3) the first measured variable in relation to the speed for reduction of disturbances.
12. The device as claimed in claim 8, wherein the data processing mechanism comprises a compensation unit for compensation (4) of inertial forces which arise in rotation of the internal combustion engine as a result of the oscillating components of such forces.
13. The device as claimed in one of claims 8 to 12, wherein the charge pressure may be taken into account in the data processing mechanism by way of a characteristic (5).
14. The device as claimed in claim 13, wherein the characteristic is linear and in particular may be acquired by way of charge pressure measurement or discharge measurements.